

AA, Sub A 11 1. (Amended) A device for kinetically controlling the rate of vapor diffusion during crystal growth, said device having defined therein discrete diffusion pathways, wherein said pathways control the vapor diffusion rate between a crystal growth solution and a reservoir solution.

[Please add new claims 19-29 as follows:]

Sub A 13 19. (New) An assembly for aiding crystal growth, said assembly comprising:
a container for holding a reservoir solution;
a device having defined therein discrete diffusion pathways; and
a seal.

20. (New) The assembly of Claim 19 wherein the diffusion pathways of the device are discrete channels.

AA2 Sub A 14 21. (New) The assembly of Claim 20 wherein the device comprises at least two channels, wherein the channels are between the crystal growth solution and at least two different reservoir solutions.

22. (New) The assembly of Claim 20 wherein the channel size or geometry can be actively controlled.

Sub A 15 23. (New) The assembly of Claim 19 wherein the device is made of a material porous to a vapor moving between the crystal growth solution and the reservoir solution.

24. (New) The assembly of Claim 19 wherein the seal is optically clear.

25. (New) The assembly of Claim 24 wherein the seal is a cover slip.

26. (New) The assembly of Claim 24 wherein the seal is optically clear tape.

27. (New) The assembly of Claim 19 wherein the seal is configured to be removably secured to the device.